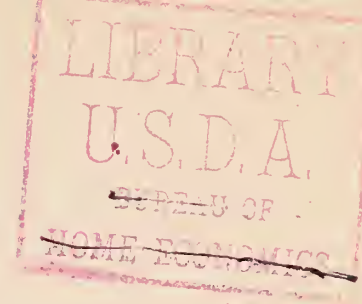


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HOME METHODS OF MENDING CHINA AND BLEACHING PORCELAIN

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The principal ways of mending china are by riveting and by cementing the seams, and sometimes the two methods are combined. Mending with rivets, i. e., short pieces of wire bent to fit into the holes drilled on each side of the seam where two pieces are joined, and usually on the underside, is a process which requires skill, training, and practice. Professional china menders very commonly use this method. Its origin is uncertain, but it is not unlikely that it came from China where it is very commonly practiced and with a high degree of success. This kind of mending is very durable.

Mending with cement is easier and when the work is well done with suitable materials, the results are good. The older formulas had a disadvantage as a rule in that the materials used as cements were not very resistant to washing, particularly with hot water. One of the cements, however, white lead, is an exception to this and is used today as in the past with good results. The advantages of this method have been demonstrated in a series of tests as well as by the experience of others. When well done such mending is strong and durable.

Another type of cement which has given good results in extended trials is a solution in acetone or some similar solvent of nitrocellulose or pyroxylin, sometimes called "soluble cotton." Cements of this sort are on the market. If with use it drops apart, an article thus mended can easily be cemented together again. A similar cement can be made by dissolving colluloid cut into very fine pieces in amyl acetate or acetone or a mixture of the two.¹

¹ Lucas, A

1924. Antiques: Their restoration and preservation. Edwin Arnold and Co., p. 16-18. London.

In all cases it is highly desirable to examine carefully the pieces which require mending to find out whether or not any portions are missing and also to study the proper relation of each piece to the others and to plan how the parts may be most conveniently built up into a whole. It is often convenient when working with them to keep the pieces in a receptacle as a plate or tray where they can be arranged in the order in which they are to be used and easily located as needed. Not only must china be clean but all the articles used must be clean and the hands must be scrubbed repeatedly, otherwise the seams will have a dingy look. Turpentine can be used to remove paint which gets on the fingers. Acetone or amyl acetate (banana oil) used in the same way will remove pyroxylin cement.

The white lead used for mending is that which painters use in mixing white paint; namely, white lead ground in oil which is sold in small as well as large tins. When not in use the tins should be kept tightly closed to exclude the air so that the white lead will not harden. A common custom to prevent hardening is to fill the can with water above the paint and then put on the cover. When next the can is used the water should be poured off and then later replaced. The white lead sometimes gets so thick that the amount needed for a piece of repair work should be thinned with a few drops of linseed oil and dryer worked into it. White lead hardens very slowly so some way of keeping the mended portions in position until the white lead becomes hard is essential. The old way was to tie the parts in place and put the mended article away where it could remain undisturbed for a year or so. Tying the dish so that the mended parts will not get out of place, is not an easy matter, particularly if there are a number of parts, and especially difficult if the article has a round outline.

It has been found that excellent results can be obtained by dropping melted sealing wax in two or more places on the seam after the white lead has been applied. If the pieces are large, and it can be conveniently done, it is

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best to drop it on the back as well as on the front side of the seam. The sealing wax hardens quickly and holds the pieces so firmly in position that the article can be built up one piece after another. After the long drying period the sealing wax can be scraped off and also any surplus white lead which may have hardened on the surface of the mended article. Any remaining bits of the wax can be wiped away with a little cotton dipped in alcohol and traces of the white lead with turpentine.

In such repair work a thin coat of white lead should be applied to each of the two pieces at the place where they are to be joined. They should be carefully fitted together and then held firmly while an assistant drops the sealing wax on two or more places on the seam. Great care should be taken in doing this as a drop of the hot sealing wax makes a painful burn. The procedure is repeated until the whole article is built up.

The white lead as it must be used to give a good joint adds an appreciable amount to the linear surface of the article mended and the thicker the seam, the greater is the distortion of the shape. It should be an object, therefore, to use as little white lead as will serve to make a good joint, for instance, a layer about as thick as the blade of a dinner knife.

A variant of the white lead method is to use a mixture of white lead and good varnish, 3 to 1. One advantage is that this dries more quickly than does white lead alone. It has been recommended by some as especially useful in mending heavy pottery such as bathroom equipment. A convenient way to apply white lead with or without varnish is with a very small-sized palette knife or the blade of a small pocket knife.

If the seams on the mended article show up very clearly by contrast, it is possible to paint them to match their surroundings, artist's oil colors

being used and a fine sable brush, a No. 2 for instance.

If the article to be mended is porous earthenware with or without a glaze or a slip surface, the edges to be joined should be given a thin coat of white lead which should be rubbed in with the tip of the finger and any surplus then scraped off. After standing for an hour or two, another coat of white lead can be added and the seam completed by pressing the two pieces into place and holding them by sealing wax.

The same care in sorting of parts and in endeavoring to locate their position should be exercised in mending with pyroxylin cement as with white lead, and here, also, it is best to begin at the base and build up, unless there is some reason which makes another way more convenient.

In joining two pieces together the cement can be applied directly from the tube to each of the two edges which are to meet. An excess of cement should be avoided by squeezing the tube only very slightly. The joined parts should be tightly held together until the cement sets which should not take very long. After the cement has hardened sufficiently, place the article if possible so that the force of gravity will aid in keeping the parts in position (the ideal being such a position that the parts would not drop apart if there were no cement to hold them). An old method which was regarded as helpful was to have a shallow box or a shallow pan with a layer of fine sand two or three inches deep. Into this one edge of the piece of china can be placed so that upright or at an angle as the case may demand, the upper piece will have no tendency to fall. When the two pieces are well cemented together, another piece is added and the cement allowed to harden and the procedure continued. When the pieces are all in place and the joinings are hardened, any surplus cement can be removed by scraping away with a thin blade of a pocket knife. If there seems

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to be need, the seams can be tinted with artist's oil colors as already described.

Putty is sometimes used for mending earthenware and porcelain but so thick a layer is needed to join the pieces successfully that it very noticeably distorts the shape of the article mended. Where utility is more important than appearance this would not matter. Sometimes articles mended with putty have the outside and sometimes the inside also of the seam covered with a layer of putty. For such mending, putty should be soft enough to be used easily, and if it is necessary to soften it, it can be done by kneading it well, adding from time to time a few drops of linseed oil.

Putty can also be used sometimes to replace a missing knob or other projecting part. For instance, a knob can be molded from it to replace a missing one and as putty adheres firmly to porcelain it is of practical use and can be of good appearance. When thoroughly hardened, which takes a long time, the shape of the putty knob can usually be improved by working it down with fine sandpaper to match as closely as possible the shape of the original knob. The putty can then be painted to match the ground color and decoration of the rest of the article. For this purpose artist's oil colors should be used and more than one coat may be necessary. When the paint is dry, a thin coat of light-colored varnish should be applied or one of the pyroxylin lacquers or some similar lacquer impervious to water.

Putty was formerly used also to fill spaces left by fragments too small to be picked up or to be pieced together. The putty was generally applied in an overlapping patch. At best this was somewhat unsightly. The two following methods of filling such places are preferable.

Plaster of Paris mixed to a thick creamy paste with water can be used to

replace missing parts. When thoroughly hardened it can be rubbed down and makes a patch which is satisfactory as regards appearance but which is fragile. However, there are many kinds of repairs where this will answer every purpose. If desired, it can be painted to match its surroundings. Plaster of Paris mixed with glue and also finely ground clay mixed with glue or mucilage can be used for making patches which are tougher than those made with plaster of Paris and water. These, too, can be rubbed down and colored to match their surroundings.

Professional china menders make porcelain patches to fit a given space. They are fired, glazed, decorated as need be, and cemented into place. Special training is needed for this work and it requires knowledge and equipment that the homemaker does not usually have. It sometimes happens, however, that one has extra knobs or fragments of porcelain which will match some article from which parts are missing. In such cases it might be possible to rub them down with fine sandpaper or emery paper until the patches will fit and then cement them into place.

For large articles like heavy jardinières and similar kinds of pottery, patches can be made of Portland cement reinforced, if need be, with wire netting like that used for window screens. For instance, a patch of this sort was made for a tall piece of china from which a large piece had been broken from one side and lost. A piece of wire screen of suitable size was fastened with surgeon's plaster to the inside of the jar in such a way that it covered the hole. To the inside of the piece of screen a paper was attached and the jar was then packed full of sawdust. This gave a firm surface on which the cement, mixed to a thick paste with water, was spread and worked down until it conformed to the outline of the jar. When the cement had thoroughly hardened and the sawdust and paper had been removed from the jar, the surface of the

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patch was rubbed down with fine sandpaper and given a number of coats of white lead paint. When well hardened this was rubbed down and the decoration was reproduced using oil colors for the purpose and later a coat or two of varnish was applied. This procedure is suitable for large articles rather than small ones.

For small patches a thick liquid or paste can be used which is made by dissolving finely divided celluloid in amyl acetate or acetone. This can also be used for mending chipped places. The method of applying it is to let the celluloid paste drop from a piece of wire or a splinter of wood into the place it is desired to fill. Usually the patch will decrease somewhat in size in hardening. More of the paste is then applied and this is repeated until the space is filled. The patch is then rubbed down with sandpaper or emery paper to match its surroundings. In appearance it is very much like translucent china. It can be decorated with oil colors to match as already described.

Pyroxylin cement paste is also useful for filling chipped places and for supplying missing parts. A thick paste made by rubbing together the cement with whiting or plaster of Paris was used with good results, particularly for small patches which, when hard, were rubbed down, colored, and decorated.

A tougher patch can be made with a thick yet pliable paste made of fine wood flour or very fine sawdust thoroughly mixed with pyroxylin cement. This can be conveniently made by rubbing the ingredients together on a porcelain palette such as china painters use or on a plate of suitable size. Such a paste should be stiff enough to hold its shape while drying. If it becomes hard it can be softened again by adding a little amyl acetate or acetone. When not in use it can be kept in a receptacle which has a tightly fitting cover. A small palette knife such as artists use is a very convenient tool for such

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The second part of the document outlines the various methods used to collect and analyze data. It includes a detailed description of the survey process, the selection of participants, and the use of statistical software to process the results. The goal is to provide a comprehensive overview of the data collection process and the findings of the study.

The third part of the document presents the results of the study. It includes a series of tables and graphs that illustrate the data collected. The tables provide a detailed breakdown of the data by category, while the graphs provide a visual representation of the trends and patterns. The results show that there is a significant correlation between the variables studied, and that the data collected is reliable and valid.

The fourth part of the document discusses the implications of the study. It highlights the key findings and the conclusions drawn from the data. It also discusses the limitations of the study and the areas for future research. The document concludes by emphasizing the importance of the study and the need for continued research in this field.

work. It is well to let the patch overlap a little front and back as this anchors it more firmly in place and to allow the mended article to stand undisturbed for weeks, perhaps months. Sometimes a patch will shrink and come out. If this happens, it can be cemented in place either with pyroxylin cement or with a wood paste thinned with the usual solvent. Patches of this sort can be finished and decorated in the manner already described.

BLEACHING PORCELAIN

It often happens that porcelain or china becomes stained or ill-smelling owing to the fact that the surface has become crackled and fat, tea, coffee, or other material has penetrated through these minute cracks to the material underneath. Housekeepers have tried a number of procedures, such as baking in a hot oven, or "boiling out" with ashes and water, or with lye solution, and these are effective in removing the odor, but are very likely to remove the glaze also and ruin the dish.

A procedure that has given good results in a number of cases is to keep the article immersed in boiling water to which a small amount, say a tablespoon of sodium phosphate and a teaspoon of borax to every quart of water has been added. This should be kept up until the article is free from odor and until the color is restored more or less completely. This frequently takes a number of days. In the tests which have been made, the glaze was not injured, at least to any noticeable extent, except on lusterware. It is, of course, highly desirable to select household articles which will not be affected in this manner. However, it frequently happens that a dish which is highly prized as an heirloom would be greatly improved in appearance if such stains were removed.

My dear Mr. [Name],
I have just received your letter of the 10th inst. and am
glad to hear that you are well. I am
also well and hope this letter finds you
the same. I have been thinking of you
very much lately and wondering how
you are getting on. I hope you are
as well as ever.

I have been very busy lately with
my work, but I have managed to find
some time to write to you. I hope
you are still interested in the
subject of [Topic]. I have been
thinking about it a great deal lately
and wondering how you are getting on.
I hope you are still interested in
it.

I have been thinking of you very
much lately and wondering how you
are getting on. I hope you are
as well as ever. I have been
very busy lately with my work, but
I have managed to find some time
to write to you. I hope you are
still interested in the subject of [Topic].

I have been thinking of you very
much lately and wondering how you
are getting on. I hope you are
as well as ever. I have been
very busy lately with my work, but
I have managed to find some time
to write to you. I hope you are
still interested in the subject of [Topic].